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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,282	02/20/2001	Roger G. Etter	ENV1298-0021	4587

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EXAMINER	
GRIFFIN, WALTER DEAN	

ART UNIT	PAPER NUMBER
1764	

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/763,282	ETTER, ROGER G.	
	Examiner	Art Unit	
	Walter D. Griffin	1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15-31,33-65,73-80 and 82* is/are pending in the application.

4a) Of the above claim(s) *15-18,33 and 73-80* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *19-27,29-31,34-65 and 82* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/9/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The objection to claim 81 and the rejections under 35 USC 112, second paragraph, as described in the paper mailed on April 22, 2004 have been withdrawn in view of the amendment filed on October 25, 2004.

Election/Restrictions

Applicant's election of Group II, claims 19-31, 34-72, 81, and 82 in the reply filed on October 25, 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 19-27, 29-31, 34-65, and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gamson (US 3,684,697) in view of DE 19540780A1.

The Gamson reference discloses a process for producing a sponge coke. The process comprises obtaining a coke precursor material derived from crude oil such as residual hydrocarbon from distillation processes and mixing it with another material such as solid residue from synthesis of plastics (e.g., polyethylene and polypropylene) or aromatic oils. The mixture is then subjected to delayed coking conditions to produce the sponge coke. The coke is cooled and then recovered. The addition of the material to the precursor would necessarily improve the adsorption characteristics of the resulting coke. Also, since the process of Gamson is similar to the claimed process, the resulting coke would appear to have VCM amounts within the claimed ranges. See entire document.

The Gamson reference does not disclose adding at least one chemical compound to the coke in a coke-quenching portion of the thermal cracking process.

The DE 19540780A1 discloses the quenching of coke with an aqueous solution that contains iron salts, sodium salts, and oxygen-containing compounds. See entire document and the English language abstract.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Gamson by including the quenching step disclosed by the DE 19540780A1 reference because atmospheric pollution will be reduced. The coke resulting from the modified process would appear to have the claimed characteristics

including containing a sulfur sorbent since sodium salts would be added by the quenching step of the DE 19540780A1 reference.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gamson (US 3,684,697) in view of DE 19540780A1 as applied to claim 25 above, and further in view of Yan (US 4,096,097).

The previously discussed references do not disclose or suggest calcining the coke.

The Yan reference discloses that the calcination of sponge coke results in the production of coke that is suitable for the manufacture of electrodes. These electrodes can be used in aluminum production processes. See column 5, line 54 through column 6, line 58.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the combined teachings of the previously discussed references by calcining the coke as suggested by Yan because the resulting coke will have characteristics that make it suitable for use in aluminum production processes.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 19-31 and 82 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3 and 19-21 of U.S. Patent No. 6,168,709 in view of DE 19540780A1.

The patented claims disclose a process for making a coke. The patented claims do not include the step of adding a chemical to the coke during the quenching step.

The DE 19540780A1 reference discloses the quenching of coke with an aqueous solution that contains iron salts and oxygen-containing compounds. See entire document and the English language abstract.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the patented claims by including the quenching step disclosed by the DE 19540780A1 reference because atmospheric pollution will be reduced. The coke resulting from the modified process would appear to be the same as that which is claimed in the present application.

Claims 19-31, 34-65, and 82 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-56 of copending Application No. 09/556132. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are directed to essentially the same coking process with the specification of various waste materials varying between the claims in the present application and the claims in 09/556132. The invention as a whole would

have been obvious to one having ordinary skill in the art since both sets of additives have common elements, e.g., wood wastes.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

The argument that the Gamson reference does not teach a means or incentive to produce coke with the claimed characteristics including VCM content is not persuasive because the Gamson reference discloses a process that is similar to the claimed process. Therefore, the examiner maintains that the coke product resulting from the process of Gamson is similar to the coke product produced by the claimed process. Applicant has not provided evidence to the contrary.

The argument that the Gamson reference does not teach producing a porous sponge coke for the addition of other chemical compounds is not persuasive because the rejection is based on a combination of references. In this case, the examiner maintains that the combined teaching of the Gamson and DE references would suggest to one having ordinary skill in the art to add other chemicals to the coke in order to reduce atmospheric pollution.

The argument that the claimed process differs from the prior art processes by controlling the coke quality via thermal process operating conditions (i.e., primarily reducing the coke drum temperature) is not persuasive because the Gamson reference produces sponge coke at the disclosed conditions. Applicant has not shown that this claim language distinguishes over the process disclosed by Gamson.

The argument that the DE reference does not teach the controlled injection of selected chemical compounds via quenching petroleum coke within the cracking process is not persuasive. The language in the claims requires the addition of the chemical compound in a coke quenching portion of the cracking process. This is the same as disclosed in the DE reference.

The argument that one would have no reason to make the combination of the Gamson and the DE references is not persuasive. The DE reference discloses an advantage for adding the compounds to the coke. The examiner maintains that such an advantage would provide motivation to one having ordinary skill in the art to combine the Gamson and DE references.

The argument that the prior art would not suggest the combination of the previously discussed references with the Yan reference is not persuasive. The examiner maintains that the disclosure in the Yan reference that carbonaceous material can be added to a coking zone feed to produce a sponge coke would provide motivation to add the material to the feed of Gamson since Gamson desires to produce a sponge coke.

The arguments concerning the obviousness-type double patenting rejection over the claims of U.S. Patent 6,168,709 in view of the DE reference are not persuasive for similar reasons discussed above.

The argument that the obviousness-type double patenting rejection over claims 1-56 of application no. 09/556132 is improper because of the differing filing dates of 09/556132 and the current application is not persuasive. The potential problem of dual ownership of patents to patentably indistinct inventions is not avoided just because of the differing filing dates.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter D. Griffin whose telephone number is (571) 272-1447. The examiner can normally be reached on Monday-Friday 6:30 to 4:00 with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Walter D. Griffin
Primary Examiner
Art Unit 1764

WG
January 11, 2005